a plurality of gas analyzers each including:

a gas analyzer unit for analyzing respectively specified gases and having a plurality of outputs;

a plurality of AD converters each having a plurality of inputs respectively connected to said plurality of outputs of said gas analyzer unit according to a connection condition, each of said AD converters having an output;

an internal bus connected to said output of each of said AD converter; and

a memory unit connected to said internal bus for storing a connection condition table which includes information for said connection condition;

a CPU bus connected to said internal bus of each said gas analyzer; and

an analyzer processing unit including a single CPU connected to said CPU bus, said single CPU operating in accordance with a program for controlling each of said gas analyzers;

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wherein said single CPU directly reads said connection condition table stored in said memory unit of said gas analyzers without the aid of additional CPUs being coupled to said internal bus of each said gas analyzer.



7. A gas analyzer system as claimed in claim 6 wherein:

each of said inputs of each of said AD converters has a port number and a channel number assigned thereto; and

said connection condition table includes an AD converter changeover table;

said memory unit storing information in said AD converter changeover table in including a port number of an input of an AD converter to be read and a channel number assigned to said input to be read, in response to said single CPU reading signals from each of said gas analyzers per unit time, and providing said information sequentially per unit time.

8. (Newly Added) A gas analyzer system as claimed in claim 7 wherein said connection condition table includes a channel information table;

said channel information table including:

channel specific information indicative of said channel number;

gain for adjusting a signal input to said channel in one of said AD converters;

a spike flag indicative of spike noise;

a gain flag indicative of any gain needed to correct said outputs of said AD converters; and

a numerical value indicative of measuring space.

9. (Newly Added) A method for controlling a gas analyzer system, the gas analyzer system including a plurality of gas analyzers each having a gas analyzer unit with a plurality of outputs for analyzing a respective gas, a plurality of AD converters each having a plurality of inputs respectively connected to the outputs of the gas analyzer unit according to a connection condition, an internal bus connected to an output of each AD converter, and a memory unit connected to the internal bus for storing a connection condition table which includes information for the connection condition, said method comprising:

providing an analyzer processing unit including a single CPU connected to a CPU bus such that said CPU bus is connected to the internal bus of each of the gas analyzers;

directly reading with said single CPU the connection condition table stored in the memory unit of the gas analyzers without the aid of additional CPUs disposed within each of the gas analyzers;

reading with said single CPU a signal input to the AD converter in the gas analyzers in accordance with the connection condition table stored in the memory unit, thereby reading out the input from the gas analyzer unit which outputs respectively different signals.